

8. FREDERICK SOUND

(1) This chapter describes Frederick Sound, Le Conte and Thomas Bays, the N part of Keku Strait, Saginaw and Security Bays, and the city and harbor of Kake.

(2) **Charts 17320, 17360.—Frederick Sound** has its entrance from Chatham Strait between Kingsmill Point and Point Gardner and extends NE to The Brothers and Cape Fanshaw, at the entrance to Stephens Passage, and SE to Dry Strait, a high-water boat passage connecting it with the E end of Sumner Strait. The sound is open and clear of obstructions, and has few offshore dangers to navigation. The shores and islands of the sound are all high.

(3) **Currents.**—The tidal current on the flood enters Frederick Sound from Chatham Strait; it sets N into Stephens Passage and through the E arm. The ebb sets in the reverse direction.

(4) Strong flood and ebb currents were observed in the vicinity of Cape Fanshaw, Round Rock, and in the passage between Turnabout Island and Kupreanof Island. Standing waves were sometimes observed in the vicinity of Cape Fanshaw when strong winds shift rapidly from SE to N.

(5) Current observations made between Cape Fanshaw and Cape Strait indicate that the ebb or W current is considerably stronger than the flood. In the vicinity of Cape Strait the ebb velocity is about 1.5 to 2 knots and it is probable that the current floods only with the largest tides of the month.

(6) **Weather.**—Although sheltered from the open Gulf, Frederick Sound and its surrounding waterways are subject to local effects because of the high ground that surrounds the area. Many locations are vulnerable to strong SE winds, which are a problem from October through February. Visibilities are most often a problem from about November through March, and least often a hazard in April, May, and June. The winter maximum indicates restrictions of visibilities because of snow. Precipitation is most likely from September through December with an October peak, when about 9 inches falls on 18 days on average. Temperatures fall below freezing on about 90 days during the year, while in summer they climb to 70°F or above on just a few. Extremes range from just below 0°F to about 80°F over the open water. To the SE, in the more restricted and more continental regions, the temperature range is much greater and extremes range from about -15°F to the mid 80's.

(7) **Ice.**—Glacial ice from Le Conte Bay is generally present in the E arm of Frederick Sound, and at times in large quantities. The ice generally follows the N shore of the sound as far as the entrance to Thomas Bay. Under certain conditions of wind and weather, ice may be expected as far as the Sukoi Islets, and it may also be found at Cape Strait and Turnabout Island. Occasionally a few stray pieces of ice work into Wrangell Narrows as far as Green Point, making navigation dangerous.

(8) **Charts 17360, 17377.—Camp Island, Pocket Island, and Hidden Island** are wooded islands on the flats N of Dry Strait.

(9) **Ideal Cove** has its entrance on the S side of Frederick Sound, about 13.8 miles SE of Wrangell Narrows and 1.2 miles S of Coney Island. Log storage extends along the E shore of the cove to the head. At times, logs take up the whole cove. Small craft desiring moorage will tie up to the log booms. A well-defined rock awash is close to the E point of the entrance. A

small islet is on the W side at the entrance. Cosmos Point, the E point of the entrance, is wooded.

(10) **Coney Island** is steep-to; the edge of Stikine River flats is about 0.5 mile E of it, and reefs extend 0.3 mile N from the point 0.8 mile S of the island.

(11) **Le Conte Bay**, on the N side of the head of Frederick Sound, at times is inaccessible because of floating ice. The great depths in the bay prevent anchorage. Le Conte Bay is entered from Frederick Sound through a very narrow passage just N of Stikine River flats. At the entrance, a reef that bares at low water extends from the N shore halfway across the passage. Several groundings have occurred on this reef; extreme caution is advised. The bay is very shallow along its W edge from the mouth N to Timber Point. Boulders 1 to 3 meters in size are located in the narrow channel and are displaced about by ice bergs that sweep through the area. Strong currents have also been noted in this area.

(12) Large icebergs from **Le Conte Glacier** are a menace to navigation from Camp Island to **Frederick Point**.

(13) The shores of Frederick Sound, from Wrangell Narrows to Cape Strait, are bold. The SW shore can be safely approached as close as 0.5 mile. A ledge, which uncovers about 8 feet, is about 0.3 mile from the head of the bight, about 3 miles N of Prolewy Point, the NW point of the entrance to Wrangell Narrows.

(14) The **McDonald Islands** are two small islands about 3.8 miles E of the N entrance to Wrangell Narrows. The E island, 228 feet high, is the larger.

(15) **Brown Cove**, on the NE side of the sound, about 5.5 miles NE of the entrance to Wrangell Narrows, affords indifferent anchorage in 11 to 12 fathoms at the entrance. The head of the cove bares at low water.

(16) **Sukoi Islets**, locally known as **Sockeye Islets**, are two wooded islands, with a smaller one between, about 3.8 miles N from the entrance to Wrangell Narrows and about 1 mile off the W shore of Frederick Sound. The westernmost and largest island is about 330 feet high. The easternmost island is about 120 feet high, and the middle island is low. **Sukoi Islets Light** (56°53.7'N., 132°56.6'W.), 18 feet above the water, is shown from a skeleton tower on a concrete pier with a red and white diamond-shaped daymark on the westernmost islet. The usual channel is W of the islets.

(17) **Charts 17367, 17360.—Point Agassiz** (56°55.4'N., 132°53.0'W.), on the SE side of Frederick Sound, is low and wooded. An extensive marsh flat extends about 2 miles to the N.

(18) **Beacon Point**, on the W shore, WNW of Point Agassiz and about 3.6 miles N of Sukoi Islets, is marked by a daybeacon.

(19) **Cape Strait** is marked by **Cape Strait Light** (56°59.9'N., 133°05.5'W.), 30 feet above the water, shown from a skeleton tower with a red and white diamond-shaped daymark.

(20) About 1.4 miles SE of Cape Strait are a small valley and bight. A reef, which has a wooded islet, extends 0.2 mile off the point on the E side of the bight.

(21) **Thomas Bay**, about 3.6 miles E of Cape Strait, is the large estuary on the N side of Frederick Sound between Wood Point and Point Vandeput. The entrance, marked by buoys, is about 10 miles N of the N entrance to Wrangell Narrows and 22 miles ESE of Cape Fanshaw. Good anchorage with protection from SE weather can be had off the S shore well inside Wood Point. Very

good small-craft anchorage can be had in either of two small coves on the E shore of Ruth Island in depths of 3 to 10 fathoms, soft bottom.

(22) **Thomas Bay**, from the bar to **Baird Glacier**, at its head, is about 10 miles long. The moraine of Baird Glacier was reported to have encroached to a point about 900 yards S of **Elephants Head** in 1976. On the SE side is an arm that extends S to the moraine of the **Patterson Glacier**. These glaciers do not discharge ice into the bay.

(23) **Wood Point**, the E point of the entrance to Thomas Bay, is low and wooded. A kelp-covered reef, largely bare, extends 0.6 mile off Wood Point. A lighted bell buoy and an unlighted buoy mark the W extremity of the reef.

(24) **Point Vandeput** is the S extremity of a low neck of land that extends 2.5 miles S from shore on the NW side of the entrance to the bay. A detached clump of trees is at the end of the wooded section of the point. A narrow channel, with a depth of 4 fathoms, separates the reef S of the point from a kelp-covered bar that extends 0.8 mile farther in a SE direction. A buoy marks the SE end of the bar. The 4-fathom channel should be used with local knowledge.

(25) The entrance channel between the bar and the reef W of Wood Point has depths of $4\frac{3}{4}$ to 14 fathoms.

(26) The **tidal currents** have a velocity of about 3 knots over the bar at the entrance to Thomas Bay, and swirls occur at times from the shoal spot in the middle of the channel to Point Vandeput. The swirls are little felt in the channel E of the shoal spot.

(27) **Spurt Point**, in Thomas Bay, about 3.5 miles E of Point Vandeput, is steep and wooded.

(28) In 1982, several rocks that bare at low water were reported to be about 0.8 mile W of Spurt Point; caution is advised in this area.

(29) **Bock Bight**, about 1.8 miles E of Wood Point, is a narrow and deep bight. The entrance to the bight is bare nearly 2 hours before low water, forming a dam with deep water inside that overflows with great force except at slack water.

(30) **Ruth Island** is the large island on the W side of the entrance to the SE arm of the bay; close to its N end are a small islet and some low-water rocks. The NW entrance to the passage W of Ruth Island is shoal, but may be used by small vessels.

(31) **Spray Island** is on the E side of the SE arm E of the center of Ruth Island. A mooring buoy is about 0.25 mile SE of the island in about $56^{\circ}59'51''\text{N.}$, $132^{\circ}47'08''\text{W.}$

(32) Anchorage for small boats may be had in 5 fathoms off the NW entrance of the passage between Ruth Island and the mainland. Anchorage for small vessels may be had in the bight E of Spray Island in 18 fathoms. The anchorage is close to the beach that is steep-to. Anchorage for larger vessels may be had in 11 fathoms, mud bottom, off the bight at the SE end of Ruth Island.

(33) **Scenery Cove**, in the N part of Thomas Bay, does not afford anchorage except for small craft. Large vessels can anchor at the entrance to the cove in 7 to 15 fathoms.

(34) **Farragut Bay** is the large indentation on the N side of Frederick Sound, about 8 miles NW of Cape Strait. The entrance, between Grand Point and Bay Point, is about 20 miles NW of the N entrance to Wrangell Narrows and 12 miles ESE of Cape Fanshaw.

(35) **Grand Point**, the E point at the entrance to Farragut Bay, is marked by **Grand Point Light** ($57^{\circ}05.5'\text{N.}$, $133^{\circ}11.2'\text{W.}$), 16 feet above the water and shown on a pile with a red and white dia-

mond-shaped daymark. The point is low and rocky at its end. **Bay Point**, the W point at the entrance, is bold and wooded.

(36) Farragut Bay has two arms. The W arm is smaller, and its entrance is obstructed near midchannel by a rock awash, and by a shoal that extends from the W shore. Vessels may enter by favoring the E shore. The E arm expands into a large bay known as **Francis Anchorage**. SE winds are reported to draw through the anchorage with velocities up to 60 mph. Small craft may find anchorage with adequate protection in close to the E shore, just N of the projecting point, in 4 to 5 fathoms. The extensive tidal flats at the head of the bay were reported to be encroaching in 1976. Tidal currents have little velocity in the bay.

(37) **Read Island** is just inside the entrance on the E side of Farragut Bay. A very narrow passage, which may be used by small craft, and with reported depths of 4 fathoms, leads between the island and Grand Point. In June 1988, an obstruction was reported in the passage about 0.25 mile NNW of Grand Point Light in about $57^{\circ}05'45''\text{N.}$, $133^{\circ}11'13''\text{W.}$ A shoal area with a rock awash about midway and an unnamed islet at the outer end extend off the NE end of Read Island.

(38) **Flock Rock** is a small rock islet in the middle of the passage N of Read Island. Submerged rocks are reported to be between Flock Rock and the shore.

(39) A small vessel can make a temporary fair-weather anchorage between Grand Point and the S end of Read Island in 5 to 6 fathoms, hard bottom. Of the four coves or indentations making into the E side of Read Island, the third, leading N, is reported to provide the best anchorage for small vessels in 3 to 5 fathoms, rocky bottom. A log storage area is along the E shore of the bay about 1.2 miles E of the NE tip of Read Island. The best passage to Francis Anchorage is W of Read Island, and between Flock Rock and Read Island, about 0.2 mile off the latter. The chart is a sufficient guide.

(40) **Portage Bay**, on the S side of Frederick Sound 7 miles W of Cape Strait and nearly opposite Farragut Bay, is a secure anchorage, but its entrance is narrow. The tidal currents in the entrance have considerable velocity at spring tides. Ice forms in the bay during extreme cold weather. **Portage Islets**, two in number, are in Frederick Sound, about 0.8 mile W of the entrance and 0.4 mile off-shore.

(41) The entrance channel has a controlling depth of $3\frac{1}{2}$ fathoms, but is constricted by shoals to a width of 150 yards. Shoals make out from the shores of the bay and also from the head to 0.8 mile N of **Stop Island**. **Harrington Rock**, 3 feet high, is about 0.2 mile NW of Stop Island.

(42) **Portage Bay Light 3** ($57^{\circ}00.3'\text{N.}$, $133^{\circ}19.5'\text{W.}$), 16 feet above the water, is shown from a skeleton tower with a square green daymark on the end of **East Point**. **West Point** is marked by a daybeacon.

(43) High-water slack is the best time to enter Portage Bay. Small boats have used the grass line of East Point, Hook Point, and a small hill in the background as an entrance range. Round East Point about 200 yards off and follow midchannel courses.

(44) Anchor in 4 to 6 fathoms from 1 to 1.5 miles NNW of Stop Island. The water shoals gradually toward the shore; there are no dangers outside the 3-fathom curve.

(45) **Charts 17360, 17368.**—From Farragut Bay to Cape Fanshaw, the shore should not be approached closer than 0.5 mile. The coast is bold and heavily wooded. **Point Highland**, 4.2

miles SE of Cape Fanshaw, is steep-to and wooded, but is not prominent.

(46) **Cape Fanshaw**, at the junction of Stephens Passage and Frederick Sound, is a long, low, wooded point terminating in a moderately long point of bedrock, with a mound of bedrock at the extreme end and deep water within 0.2 mile of the point. **Cape Fanshaw Light** (57°11.1'N., 133°34.4'W.), 33 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on the point of the cape.

(47) **Turnabout Island**, about 13.5 miles WSW of Cape Fanshaw, is high and wooded. The shores are fairly bold except at the S end. The cove on the NW side of the island has temporary anchorage for small craft. An islet, 0.5 mile SW of Turnabout Island, shows as two rocks about 20 feet high, at high water; but at low water the ledge surrounding the islet shows for about 800 yards SW and on the line of the bare rocks. A clear channel 1.5 miles wide, between these rocks and Pinta Rocks, may be safely used in the daytime and with clear weather. **Turnabout Island Light** (57°07.9'N., 133°59.3'W.), 23 feet above the water, is shown from a spindle with a red and white diamond-shaped daymark on an islet N of Turnabout Island. A 5¾-fathom spot is about 0.7 mile SSW of the light in about 57°07'22.7"N., 133°59'56.9"W.

(48) **Pinta Rocks** are two patches of rocks surrounded by extensive kelp beds about 2.2 miles S from Turnabout Island and about 1 mile off the main shore. **East Pinta Rocks**, covered at about half tide, are marked on the N side by a buoy. **West Pinta Rocks** are marked at the W end by a light, 30 feet above the water and shown from a pile with a red and white diamond-shaped daymark.

(49) The passage S of Pinta Rocks is used extensively by small craft, and is especially valuable when going against the current, since the currents here are much weaker than those N of the rocks. Slack water in this passage occurs up to 2 hours before predicted high and low waters.

(50) **Cape Bendel**, a rounding wooded point, is about 4 miles S of Turnabout Island. In rounding Cape Bendel, keep well offshore to avoid the foul ground and rocks awash that extend 0.8 mile off the cape in the direction of West Pinta Rock.

(51) **Keku Strait, northern part.**—Keku Strait is divided into three parts: a S bay, a N bay, and a narrow intricate passage about 18 miles long known as Rocky Pass, which connects the two bays. The S bay and Rocky Pass are described in chapter 7. Rocky Pass is shown in detail on chart 17372.

(52) The N bay of Keku Strait is about 13 miles long from the entrance to Point Camden where the bay branches, the W branch forming Port Camden and the E branch forming Rocky Pass. The NE shore of the bay is formed by **Kupreanof Island** and the SW shore by **Kuiu Island**. The entrance from Frederick Sound is between Point Macartney and Cornwallis Point.

(53) **Point Macartney**, the NE point at the entrance from Frederick Sound, 2.5 miles S of Cape Bendel, is a long, low, wooded point, terminating in an abrupt wooded islet with two tree- and brush-covered masses of rock between, all connected by a rocky platform at low water. **Point Macartney Light** (57°01.5'N., 134°03.5'W.), 20 feet above the water, is shown from a pile with a red and white diamond-shaped daymark on a small islet off the point. A rock awash is about 0.8 mile SE of the light.

(54) **Point White** is about 2 miles SE of Point Macartney. Rocks and reefs extend SE from a point about 1.1 miles SSW of

Point White. The rocks and reefs connect with **Mosquito Islands**, Grave Island, **Burnt Island**, and **Hamilton Island**, to form a chain over 4 miles long. The chain is parallel to and about 1 mile off the NE shore of the bay and is marked at its NW end by Kake Entrance Light 2 (56°59.1'N., 134°01.2'W.). A narrow channel, between the chain and the Kupreanof Island shore, leads SE to **Kake Harbor** and the city of Kake. **Grave Island**, small and scrubby, is about 1 mile S of Kake and 3 miles SE of the northwesternmost reef. The island is marked on its NE side by **Kake Harbor Light** (56°57.6'N., 133°57.2'W.), 16 feet above the water and shown from a square frame with a red and white diamond-shaped daymark. Anchorage may be found in Kake Harbor in 15 fathoms, soft mud, between the city and Grave Island.

(55) **Kake**, about 4.4 miles SE of Point Macartney, is a community with three stores, a lodge, and an Alaska Public Health Center with a nurse in attendance every other month. A lighted microwave tower at Kake is prominent from the strait. Reefs, marked by a light and a buoy on their outer edges, and extensive flats, also marked by a buoy, extend 600 yards offshore and about 0.9 mile SE of Kake, respectively. A fish weir, marked by a private seasonal light, is about 250 yards NW of the cannery pier.

(56) **Routes.**—The best approach to Kake Harbor is from the NW on a SE course from between Point White and the light about 1.1 miles to the SSW. The approach to the City Pier is marked by a light and a daybeacon. If bound for the piers 1 to 1.5 miles SE of Kake, pass SW of the buoys marking the reefs off the village and the flats SE of it; when clear and S of the southeasternmost buoy, head for the piers, taking care to avoid the tidal flats to the N and the reef marked by a light about 0.3 mile SSW of the Alaska State Ferry Terminal (56°57.7'N., 133°55.1'W.). A landing on either side can be made at the cannery pier.

(57) Small craft coming from the W usually pass 100 yards off **Payne Island**, the northernmost of the Keku Islands, and head for Kake Harbor Light on Grave Island, course 088°, until within 0.5 mile of it, and then pass N of the light. Small fishing vessels approaching Kake and the cannery from the S often pass through the reef N of Hamilton Island. The channel is marked by daybeacons but may be dangerous and should only be attempted with local knowledge, preferably on a rising tide.

(58) **Wharves.**—Kake has three commercial wharves and small-craft floats.

(59) The City Pier (56°58'23"N., 133°56'38"W.): SE end of Kake; 67-foot face; 9 feet reported alongside; used by fishing vessels; owned by the State of Alaska and operated by the community of Kake.

(60) Kake Tribal Fuel Company Pier (56°57'48"N., 133°55'19"W.): about 1 mile SE of Kake; 150-foot face; 10 feet reported alongside; fueling and loading supplies to fishing vessels; owned and operated by the Kake Tribal Fuel Company.

(61) A cold storage dock is about 70 yards NW of Kake Tribal Fuel Company Pier. Ice for commercial fishing vessels and fresh fish are available.

(62) Alaska State Ferry Terminal (56°57'41"N., 133°55'10"W.): 235 feet with dolphins; 25 feet reported alongside; 35-ton steel transfer bridge; passengers and vehicles; owned and operated by the State of Alaska.

(63) **Supplies.**—Limited amounts of provisions can be had at Kake. Gasoline, diesel fuel, oils, and greases are available at the Kake Tribal Fuel Company Pier, and by truck to the other piers.

Water is available year-round at the fuel pier and seasonally at the cold storage dock.

(64) **Repairs.**—A 72-foot grid is on the S side of the approach of the City Pier.

(65) **Small-craft Facilities.**—A small-craft and seaplane float branches NW from the approach of the City Pier. A State-maintained 420-foot small-craft float with over seventy 32- to 40-foot stall floats, connected to shore by a 307-foot approach pier, extends into **Portage Bay**, about 2.3 miles SE of Kake. In 1976, 3 to 15 feet was reported alongside the float, but caution should be exercised during periods of extreme spring tides that sometimes reach minus 4 feet. Two lights and a daybeacon mark the approach from the N, but the area surrounding the float is foul and approach should only be made with local knowledge.

(66) **Communications.**—The Alaska Ferry System runs twice weekly during the summer to Petersburg and Sitka. Daily seaplane service with Juneau, Petersburg, and Sitka is available. Telephone and radiotelephone communications are maintained.

(67) **Weather.**—(See Page T-6 for **Kake climatological table**.)

(68) **Keku Islands**, on the SW side of Keku Strait, comprise a group of wooded islands, with outlying reefs, between which are no practicable channels. There are other reefs on the SW side, but they have sections showing above water and are easily avoided in daytime. Between Keku Islands and the reefs on the NE side is a channel about 1.5 miles wide and 8 miles long to Point Hamilton, with depths of 7 to 50 fathoms. S of Eva Island the channel is about 1 mile wide, between Point Hamilton and Hound Island, and leads between kelp-marked rocks and shoals on both sides.

(69) **Eva Island**, about 8 miles SE of Point Macartney, is wooded and marks the turn of the channel when bound for Hamilton Bay or Port Camden. Off its W end is a bare rock.

(70) **Point Hamilton**, about 0.9 mile SE of Eva Island, marks the entrance to Hamilton Bay. A mound-shaped islet is connected at low water with the point.

(71) **Hamilton Bay**, on the NE side of Point Hamilton, is a secure anchorage for vessels of any size. The entrance is clear in midchannel, and extensive bare flats are at the head of the bay. Two large streams enter near the head.

(72) The islands on the SW side of the channel, from abreast Eva Island to the middle of Hound Island, are fringed with kelp to a distance of about 0.4 mile.

(73) **Hound Island** is about 2 miles S of Eva Island. It is 1.5 miles long, low, and wooded, with outlying rocks at either end; on its N side are extensive kelp patches. A rock that uncovers 3 feet is about 1.2 miles S of Hound Island.

(74) **Pup Island**, about 2.8 miles SSE of Hound Island, is small, steep, and wooded, and marks **Point Camden**, the E point at the entrance to Port Camden.

(75) **Port Camden**, the entrance to which is on the W side of Pup Island and 14 miles from Point Macartney, is an inlet 13 miles long and 1.5 miles wide for a distance of 5 miles from its entrance. At this point are several islands, the most important and in midchannel, is **Cam Island**. From these islands the inlet contracts gradually to its head, which has a portage to Bay of Pillars. From the entrance to Cam Island there is 8 to 34 fathoms; above Cam Island there is 8 to 24 fathoms, decreasing to 4 to 8 fathoms 2 miles from its head. A good anchorage can be found in 20 fathoms in the wide part of Port Camden SW of Cam Island, favoring the SW shore of the inlet. Good anchorage, protected from all directions but the N, is available in 4 to 10 fathoms in the cove SE of Cam Island. Favor the W shore of the cove to avoid a large reef

and a 3-fathom shoal to the N on the E side of the cove. An excellent anchorage for small boats can be had in a small cove on the E shore E of Cam Island. The entrance shoals to 2½ fathoms. Keep close to the W shore of the entrance. Beware of the reefs on the N side of the entrance to this cove. Anchorage in 4 fathoms, well protected on all sides, can be had.

(76) **Salt Point Light** (56°50.7'N., 133°52.0'W.), 17 feet above the water, is shown on a pile with a red and white diamond-shaped daymark on the SW end of the point and marks the entrance to Davidson Bay.

(77) **Rocky Pass**, extending SE from Point Camden and connecting with the S bay of Keku Strait, is a high-water passage for small craft. (See description in chapter 7.)

(78) **Tidal currents** enter the NW part of Keku Strait and Port Camden from Frederick Sound. The velocity in the open strait is reported to be about 1.2 knots.

(79) **Chart 17368.—Saginaw Bay** indents the N shore of Kuiu Island for about 7 miles in a SE direction. **Cornwallis Point**, the N point at the entrance is low and wooded. **Cornwallis Point Light** (56°55.9'N., 134°16.4'W.), 34 feet above the water, shown from a small house with a red and white diamond-shaped daymark on the SW part of the point, marks the entrance to the bay. Shoal water extends about 0.3 mile W and N from Cornwallis Point. A rock that uncovers 7 feet, an extension of rock out from the point, is 0.1 mile WNW of the light. The high point of the rock is away from the main point of land. On an ebb tide, the current from Saginaw Bay sets toward the rock. When the current is against the wind, a considerable tide rip results. Mariners are advised to give the point a wide berth when rounding it.

(80) **Sachem Island**, small and wooded, is in midchannel in Saginaw Bay, about 2.7 miles SSE of Cornwallis Point. Shoals and other dangers extend in a NW-SE direction near midchannel from a point about 1.6 miles NW of Sachem Island to the head of the bay. In the approach to the head of the bay, there are also numerous islands with surrounding ledges.

(81) **Halleck Harbor**, on the NE side of Saginaw Bay about 1.5 miles SE of Cornwallis Point, is the best anchorage in Saginaw Bay, but is open W, and the bottom is generally hard and in places uneven. It is readily distinguished by high white bluffs on its NE side. At the foot of these bluffs are some houses and gravesites. The best channel to enter is 0.4 mile wide between the 3½-fathom rock in the entrance and the NW point. The bight at the NW end of the harbor dries. Anchorage can be had in the middle of the harbor in 8 to 12 fathoms.

(82) The piling ruins of a high-water dock are in the cove on the E side of Saginaw Bay about 3 miles SE of Halleck Harbor and N of a high island that is close to the N shore.

(83) The piling are in rotted condition, and only stubs, covered at high water, remain. These stubs are a hazard to small boats that might maneuver too close to shore in this area. A private 75-foot float, used by small boats, is anchored immediately NW of the pile ruins. In 1976, 15 feet to bare was reported alongside. Gasoline is available in an emergency only. Anchorage in 9 to 10 fathoms, with protection from the prevailing SE winds, can be had about 300 yards SW of the small-craft float. In 1976, a log storage area was along the N and NE shores of the high island in the cove.

(84) A logging camp was operating off the SW shore of Saginaw Bay, 2.5 to 3.4 miles SE of Sachem Island. A small-craft and seaplane float is at the NW end of the camp, and a log storage

area is at the SE end. A mailplane calls three times weekly in the summer. Gasoline and a small machine shop are available in an emergency only. Radiotelephone communications are maintained.

(85) **Security Bay**, about 4.5 miles SW of Cornwallis Point, is a secure anchorage. Numerous islands and ledges obstruct the entrance and bay, which should be entered with caution because of the possibility of unknown dangers.

(86) **Roadstead Island** is in the middle at the entrance, from which a chain of three small islands, **Flat Island**, **Cedar Island**, and **Harbor Island**, extends about 0.7 mile in a SE direction. The usual entrance to the bay is between Roadstead Island and Paralysis Point. It is marked by **Security Bay Light 1** (56°52.4'N., 134°22.4'W.), 32 feet above the water, shown from a skeleton tower with a square green daymark on the SW end of a ledge that extends from the N end of Roadstead Island.

(87) **Bibb Shoal**, usually showing kelp, is an extensive shoal with ½ fathom over it, on the W side of the entrance to Security Bay, N of **Paralysis Point**.

(88) **Christmas Island** is the largest of several small islands on the S side of Security Bay at its entrance; the island is bluff. Between Christmas Island and Cedar Island, the channel is 0.2 mile wide.

(89) **Cleft Island**, in the middle of Security Bay, about 1.1 mile SE of Christmas Island, is about 0.6 mile long and has a deep notch in its W end. At its SE end are some bare rocks. A narrow islet, about 0.3 mile long, is close to the NE side of Cleft Island.

(90) **Retaliation Point**, about 0.4 mile N of Cleft Island, is bluff, steep-to, and wooded. **Cedar Bight** is E of Cleft Island. Its entrance, between Cleft Island and Retaliation Point, is obstructed by a ledge bare at lowest tides and surrounded by kelp. The SE part of the bight is shoal and rocky; otherwise the depths are 4 to 6 fathoms, rocky bottom.

(91) A foul area extends W about 0.2 mile from the middle of Cleft Island to a ½-fathom spot. **Indian Rock**, a few feet above high water, and **Stewart Rock**, close N, are W of the island and both surrounded by foul ground. The usual passage is through the narrow channel between the rocks and the ½-fathom spot.

(92) The best anchorage in Security Bay is about 0.5 mile SE of Cleft Island in 9 to 11 fathoms, midway between the large island on the NE side and a wooded islet and some bare rocks near the SW side. Anchorage can also be had between the W end of Cleft Island and Harbor Island, in 11 to 16 fathoms, clear of the 1¼-fathom rock 0.2 mile SE of Harbor Island. The head of the bay is foul with several reefs, some of which cover at high water.

(93) **Band Cove** is just E of **Hourigan Point** and W of Bibb Shoal, at the entrance to Security Bay. A small vessel can anchor in the entrance in about 6 fathoms, but the cove is not clear and is open from the NW to SW. With Security and Saginaw Bays available, the cove is not recommended as an anchorage.

(94) **Charts 17360, 17320.**—This section covers the NW shore of Frederick Sound from Pybus Bay to Chatham Strait. Anchorage can be had in Surprise Harbor, Herring Bay, Chapin Bay, or Pybus Bay. Small vessels can find secure anchorage in Murder Cove.

(95) **The Brothers**, a number of large and small wooded islands, are about 2.5 miles off the W shore at the junction of Frederick Sound and Stephens Passage.

(96) Secure anchorage for small craft can be found in the narrow passage close W of the **West Brother Island** and between it and the small islet surrounded by reefs close W. The entrance is from S, passing close along the W shore of the West Brother Island. The N approach is foul. Three to four knot currents have been observed between The Brothers. Tide rips can occur at the northern end of the passes between the islands. The passage between the East and West Brother offers deep water. A foul area extends 0.5 mile S of East Brother and should be avoided. The passage between East Brother and the island to the E has a shoal laying 0.15 mile E of East Brother.

(97) **Chart 17363.—Round Rock**, 40 feet high and bare, about 2.7 miles SW from West Brother Island (chart 17360), is marked by **Round Rock Light** (57°15.6'N., 133°56.2'W.), 49 feet above the water and shown from a skeleton tower with a red and white diamond-shaped daymark. There is a clear channel about 2 miles wide between Round Rock and the NW shore, but the bottom is irregular and the depths are from 9 to 40 fathoms. The water is much deeper E of Round Rock and between it and The Brothers.

(98) **Pybus Bay** is located on the NW side of Frederick Sound, W of its junction with Stephens Passage and about 3.5 miles WNW of Round Rock Light. It is divided into two arms by a long point from which three groups of islands, rocks, and reefs extend in a S direction. The best anchorage in the bay is in Cannery Cove. Good anchorage is also available in the northeastern half of Pybus Bay between the San Juan islands and Admiralty Island in 14 to 18 fathoms of water.

(99) **Point Pybus**, the N point at the entrance to Pybus Bay, is low and wooded. A group of rocks extend 0.6 mile S from the point.

(100) **San Juan Islands**, low, wooded, and surrounded by foul ground, are about 0.8 mile SW of Point Pybus. A rock with ½ fathom over it which uncovers 3 feet is 0.4 mile SW of the southernmost and largest island; dangerous rocks are 0.2 mile W of the W point and 0.4 mile NE of the E point of this island.

(101) The channel between Point Pybus and the San Juan Islands is not recommended except for small craft with local knowledge.

(102) **Southwest Islands** are a narrow chain of four wooded islands, parallel with the W shore of the bay, about 1.5 miles SW of San Juan Islands. Foul ground extends about 0.6 mile S of **Elliott Island**, the largest of the group. Two rocks that uncover 11 and 14 feet are about 0.3 mile NNW of the northernmost island of the group. A rocky foul area, bare at half tide, is about 0.3 mile W of **Long Island**, the middle island of the group.

(103) **Grave Island**, steep-to, and wooded, is on the W side of West Channel, about 0.7 mile W of the N extremity of Elliott Island, and is a prominent landmark for this channel. Bare rocks are 0.2 mile N of the island and about 0.8 mile S of the island.

(104) **Grave Island Light** (57°16.0'N., 134°05.0'W.), 18 feet above the water and shown from a small house with a red and white diamond-shaped daymark on the SE side of Grave Island, marks the entrance to Pybus Bay.

(105) **Midway Islands** are the triangular group of wooded islands N of Southwest Islands and E of the entrance to Cannery Cove. Each island of the group has foul ground surrounding it. A dangerous rock that uncovers 2 feet is 0.7 mile SE of the N island. A 2-fathom rock is about halfway between this dangerous rock and the N island.

(106) The best passage between the E and W arms of the bay is between the NW Midway Island and the mainland. An unmarked

rock with a depth of 2½ fathoms over it is 0.5 mile W of the N point of the N Midway Island.

(107) **Cannery Cove** indents the W shore of Pybus Bay, about 3.5 miles NW of Elliott Island. The cove is nearly landlocked and affords secure anchorage in 6 to 15 fathoms, sticky bottom. A large island with an islet close to the S forms the N point at the entrance. A rock with ¼ fathom over it is in the middle of the entrance. Only a few broken piles mark the site of the cannery wharves that formerly stood on the S shore of Cannery Cove. A seasonal fishing lodge, (57°18.4'N., 134°08.1'W.), with a floating dock protected by a log-boom breakwater is on the S shore of the cove. The lodge monitors VHF-FM channel 16.

(108) **Donkey Bay**, on the W side of Pybus Bay, about 1.8 miles N of Cannery Cove, is an open bight that bares in its W part. The entrance is foul with many shoals and rocks inshore of the 15 fathom curve. Mariners are urged to steer well clear of this area.

(109) **Henrys Arm**, the southernmost of the two coves opposite Donkey Bay, has depths of 1¼ to 6¾ fathoms. The N cove is foul at the entrance and shoals quickly. The islet NW of this bight is surrounded by foul ground which extends NW joining a reef. Many hazards to navigation lie between these features.

(110) Passage to the N Section of the W arm of Pybus Bay is best made by favoring the W shore and using the 20-fathom contour for an inshore limit. Navigation of large vessels beyond the 20-fathom curve to the N is not recommended.

(111) **West Channel** extends between Grave Island and Southwest Islands and then between the Midway Islands and the W shore of the bay. Several dangers, which are shown on the chart, are passed when using this channel. Rocky islets about 6 feet high are about 0.6 mile S of Grave Island. They are not easily picked up at night. Strong crosscurrents may be encountered between Spruce Island and the entrance to West Channel.

(112) **Little Pybus Bay** (57°15'N., 134°08'W.), close W of Pybus Bay and NW of Spruce Island, is about 2.5 miles long and 1 mile wide at the entrance, and is open to the S. A chain of islets, reefs, and broken ground extends about 1.8 miles S from the E entrance point. Shoal water, with several islets and rocks, extends about 1.2 miles from the head of the bay.

(113) **Spruce Island**, small, wooded, and 2 miles from the Admiralty Island shore, is 3 miles S of Grave Island Light and 6 miles NW of Turnabout Island. (See also chart 17360.) A ledge that uncovers 8 feet extends 500 yards SW of the island.

(114) **Chart 17365.**—Woewodski and Eliza Harbors have a common entrance between **Point Napean** and **Deepwater Point** 9 miles WNW of Turnabout Island. (See also chart 17360.) The entrances are much obstructed by dangerous ledges, and with the close proximity of better anchorages the use of these harbors is seldom necessary. **Liesnoi Island**, of irregular shape, is in the entrance.

(115) **Deepwater Point Light** (57°10.3'N., 134°14.2'W.), 17 feet above the water, is shown from a skeleton tower with a red and white diamond-shaped daymark on a small islet about 0.2 mile W of the point.

(116) **Woewodski Harbor** is the open bight between Liesnoi Island and Deepwater Point. Ledges and rocks, covered or awash at various stages of the tide and generally marked by kelp, extend NE from Liesnoi Island halfway across Woewodski Harbor. **Polivnoi Rocks**, three bare rocks surrounded by ledges, are at the N edge of this foul ground. The only anchorage for large vessels in Woewodski Harbor is NE of this foul ground in 20 to 26 fathoms, hard bottom, and exposed to SE winds. Small vessels find temporary shelter off **Bluff Point** in 6 fathoms, and S of Polivnoi Rocks in 3 to 6 fathoms, soft bottom.

(117) **Eliza Harbor** is a deep inlet with generally bold shores. The only available anchorage is at the S end of the harbor, off the W side of Liesnoi Island in depths of 18 to 20 fathoms. On each side of Liesnoi Island are narrow passages called North and South Passage, leading to Eliza Harbor.

(118) **North Passage** to Eliza Harbor enters from the NW part of Woewodski Harbor. This passage is straight, but narrow; its N shore is bold-to, its S shore foul, and submerged rocks and kelp patches extend to midchannel, leaving a navigable passage 75 to 100 yards wide with least depths of 6 fathoms. The rocks on the S side of the passage cause tide swirls; the ebb has a velocity of 4 knots, and the flood about 3 knots. When through the passage, haul S and anchor in midchannel in 18 to 20 fathoms, soft bottom in places, at two-thirds the distance toward **Thumb Point**, the SW extremity of Liesnoi Island.

(119) **South Passage**, S of Liesnoi Island, is reduced by submerged rocks at its narrowest part to a width of 70 yards, has a sharp turn and strong tidal currents, and should not be attempted except at slack water and with local knowledge. The rocks are marked by kelp, which, however, does not show when the current is running. In N winds, an indifferent anchorage may be had in the entrance to South Passage in 6¾ fathoms, with the SE side of Liesnoi Island bearing 082°, and Point Napean and **Sharp Point** in line, bearing 189°.

(120) **Charts 17336, 17320.**—**Chapin Bay** is a small inlet on the N side of Frederick Sound, and on the SW side of Point Napean (57°08.5'N., 134°17.5'W.), affording secure anchorage in 9 to 11 fathoms, sandy bottom. A reef, marked by kelp, extends 0.6 mile NE from the W point at the entrance, terminating in a bare ledge in the middle of the entrance. A ledge, bare at half tide, is 330 yards SW from the N point at the entrance, and kelp shows about 400 yards S of the ledge. There is also kelp in the middle of the channel, about 0.8 mile inside the entrance, and a shoal extends 150 yards E from the point on the W side of the S entrance to the narrows.

(121) It is safest to enter Chapin Bay at low water. Enter about 400 yards SW of the half-tide ledge off the N point at the entrance and keep the N shore aboard at a distance of 200 yards until in the narrows. A midchannel course leads safely to the anchorage in the basin above the narrows.

(122) **Herring Bay**, 10 miles NE of Point Gardner Light, has its entrance between **Point Brightman** and the point to the N that separates Herring Bay from Chapin Bay. A tongue of land, prolonged by rocks, reefs, and kelp patches, extends in a SE direction from the bay, dividing it centrally into two parts.

(123) A rock awash is about 225 yards W of the charted 3-fathom shoal in the middle of the NE arm of the bay.

(124) There is a fair anchorage, open to the SE, in the SW corner of the bay, about 0.8 mile from the head. To make this anchorage, follow the S shore at a distance of about 0.4 mile, the chart being the guide.

(125) **Chart 17320.**—**Carroll Island** (57°01.7'N., 134°28.5'W.), on the N side of Frederick Sound, is a small island about 5.5 miles SW of Point Brightman and 4.5 miles E of Point Gardner Light. The island is conspicuous, but appears as a point of the main shore.

(126) **Chart 17336.—Walker Point**, about 2.4 miles ENE of Point Gardner Light, is the end of a low wooded peninsula separating Murder Cove from a foul bight E of it. Ledges and kelp surround the point to a distance of 0.2 mile.

(127) **Bartlett Point** is the end of a long, low, wooded strip separating Murder Cove from Surprise Harbor; the end of the point is two wooded islands joined by dry ledges. A bare ledge extends 300 yards S, and foul ground marked by kelp extends 0.5 mile SE and SW of the point, and more than halfway across Surprise Harbor.

(128) **Murder Cove** has its entrance between Bartlett Point and Walker Point, 2 miles E of Point Gardner. The channel narrows to 300 yards 0.4 mile inside the entrance, between a bare ledge on the E and two rocks, each with a clump of scrub, on the W. Above this point the channel has a width of about 200 yards between kelp-marked ledges, and it is best to enter at low water when the dangers show. The tide rips are sometimes heavy across the entrance when the wind is strong against the current.

(129) **Tyee** is an abandoned cannery on the E side of Murder Cove, about 1.2 miles N of Walker Point. Only submerged piles, that extend 130 yards from shore, remain of the cannery and fuel piers. Ruins of the cannery building and cabins are on shore. A 60-foot float with 5 feet reported alongside is 150 yards off the E shore. An unoccupied dwelling and a fishing cabin are on the NE side of the cove. The cabin monitors VHF-FM channel 16 daily except during the winter months. Fair anchorage, unprotected from SE winds, is in midchannel, in 8 to 11 fathoms, off the cannery site.

(130) **Point Gardner**, the S extremity of Admiralty Island, is low and wooded, and has two rocks 20 to 30 feet high, 600 yards S of the point. The W of the two rocks is marked by **Point Gardner Light** (57°00.6'N., 134°36.9'W.), 65 feet above the water and shown from a skeleton tower with a red and white diamond-shaped daymark. A prominent mound is 0.2 mile NNE from the point, and a conspicuous round hill is 1.3 miles NNE from the point. The water is clear 0.2 mile from the rocks off the point, but the rocks should be given a berth of 0.5 mile to avoid frequent tide rips.

(131) **Surprise Harbor**, on the E side of Point Gardner, is open S, has much kelp, and is not a good anchorage. It is, however, a good lee when the wind is blowing strong down Chatham Strait.

(132) To enter, keep from 0.2 to 0.5 mile off the W shore, using caution and avoiding kelp. Anchor about midharbor in 7 fathoms, rocky bottom.

(133) **Chart 17320.—Yasha Island**, about 3.5 miles SE of Point Gardner, is small, low, wooded, and surrounded by kelp to a distance of 200 yards. A rock with a depth of 1¾ fathoms over it is about 1 mile 318° from the N point of the island. A lighted buoy marks the NNW side of the rock.

(134) Heavy tide rips will be found between Yasha Island and the buoy. These tide rips sometimes extend across to Point Gardner and along that shore E as far as Carroll Island, and are dangerous for small boats.